IDAHO DEPARTMENT OF FISH & GAME

Jerry M. Conley, Director

HAGERMAN HATCHERY

Annual Report

1 October 1980-30 September 1981

by

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Fish Hatchery Superintendent III

TABLE OF CONTENTS

LIST OF TABLES

Hagerman Hatchery

ABSTRACT

This year the objective of Hagerman Hatchery, located in the Thousand Springs area of southern Idaho, was to raise 465,000 pounds of rainbow, brown, cutthroat trout, and coho and fall chinook salmon for streams, lakes, and reservoirs throughout Idaho. The total number of these species raised and planted or transferred was 2,859,738, weighing 493,732 pounds. The capacity of the hatchery is rated at 600,000 pounds of salmonids, using 115 cfs of water.

It took 898,448 pounds of feed, with a conversion of 1.82 pounds of feed to produce a pound of fish. The cost per pound of fish produced was $.66.

Author:

Burton D. Ainsworth, Jr.
Fish Hatchery Superintendent III

OBJECTIVES

1. The objective of Hagerman Hatchery was to raise 465,000 pounds of rainbow, brown, cutthroat trout, and coho and fall chinook salmon for streams, lakes, and reservoirs throughout Idaho.

2. To assist in increasing or maintaining harvest levels and populations of these species for fishing or recreational use in all waters of the state.

INTRODUCTION

Hagerman Hatchery is located in south-central Idaho, in Gooding County, in the Hagerman Valley near the Snake River, three miles southeast of the town of Hagerman. It receives its water supply from Tucker Springs and Riley Creek, and requires 115 cfs of water to operate at full capacity.

The hatchery has 24 raceways 570 feet long, varying from six feet to 15 feet wide; 18 fingerling raceways, 2.5 feet x 100 feet; and 28 concrete vats, 3 feet x 15 feet in the hatchery incubation building.

The hatchery is capable of rearing 600,000 pounds of salmonids with the present stocking schedule.

FISH PRODUCTION

Rainbow Trout

Rainbow trout are the primary species raised at Hagerman Hatchery. At the start of the fish year we had on hand 1,652,491 fish, weighing 44,500 pounds, and at the end of the fish year we had on hand 2,388,185 fish, weighing 95,500 pounds. The hatchery received 4,528,104 eyed-eggs and planted or transferred 2,208,768 fish, weighing about 435,317 pounds. The eyed eggs were received from Caribou Trout Company, Troutlodge, Hot Creek Hatchery, College of Southern Idaho, and Mount Whitney Hatchery.

Brown Trout

Some 183,450 1 1/2-inch brown trout were received from McCall Hatchery and were redistributed in Region 4 as fingerlings. The total planted was 153,840, weighing 1,282 pounds. Also, 93,000 advanced fry from Ashton Hatchery were planted in the Little Wood River by hatchery personnel.

Cutthroat Trout

We received 122,400 two-inch cutthroat trout from Grace Hatchery and 116,400 three-inch fish were planted in Region 4.

Coho Salmon

Quilcene Fish Hatchery (Oregon) supplied 1,012,609 coho salmon eyed eggs, and 353,430 fingerling weighing 4,370 pounds, were planted in regions 4 and 6.

Fall Chinook Salmon

Spring Creek Hatchery (Washington) supplied 328,320 fall chinook salmon eggs and 27,300 fingerling, weighing 650 pounds, were planted in Salmon Falls Creek Reservoir in Region 4.

FISH HEALTH

Infectious pancreatic necrosis (virus) did not cause any serious problems compared to last year, and the loss attributed to this was 125,000 fish of all species.

Periodically, a bacterial gill disease breakout occurs when the fish get into a crowded condition in the raceways. The treatment used was thinning, but when this is not possible, a treatment of cutrine and Purina 4X was used. Loss attributed to this disease was approximately 150,000 fish of all species.

There was not any incidence of enteric red-mouth diagnosed at this station this year. All of the holdover fish were vaccinated, which apparently was successful.

A protozoan (costia) occurs in the hatchery incubation building in the small fish, and caused losses of approximately 75,000 fish. A treatment of salt and formalin or cutrine and formalin usually takes care of the problem.

The problem of coagulated egg sac was prevalent this year in both the coho and fall chinook salmon. Loss suffered in the coho salmon was 500,000, and in the fall chinook salmon was 250,000.

Again this year, a loss from seagulls, night herons, and ducks occurred, and the loss was approximately 250,000 fish. The latter part of the summer a wire network was constructed and appeared to be helping.

FISH TRANSFERS

Table 1 includes all transfers from Hagerman Hatchery to other stations.

FISH RELEASES

The following are totals planted in the different regions of the state from Hagerman Hatchery:

Region 1 - There were no direct plants.

Region 2 - Rainbow trout-161,430, 34,250 pounds

Region 3 - Rainbow trout-465,670, 107,890 pounds

Region 4 - Rainbow trout-574,708, 97,450 pounds
Cutthroat trout-116,400, 1,450 pounds
Brown trout-153,840, 1,282 pounds
Coho salmon-9,800, 140 pounds
Fall chinook salmon-27,300, 650 pounds

Region 5 - Rainbow trout-191,520, 35,600 pounds

Region 6 - Rainbow trout-289,449, 23,477 pounds
Coho salmon-342,630, 4,230 pounds

Total: 2,332,747, 333,069 pounds

SPAWNTAKING OPERATIONS

The only spawntaking operation the Hagerman Hatchery personnel were involved in was the kokanee salmon trap on the South Fork of the Boise River near Pine. The personnel assisted with the installation and removal of the trap, sorting and spawning kokanee, and trap tending. The bulk of the trapped kokanee were taken to Eagle Hatchery where they were spawned.

Table l: Fish transfers from Hagerman Hatchery, October 1, 1980 - September 30, 1981

Date	Species	Receiving Station	Number	Pounds	Size
10/27/80	Rainbow	Clark Fork	38,430	6,300	6.1/lb-7″
10/29/80	Rainbow	Clark Fork	35,910	6,300	5.7/1b-7 ½"
11/17/80	Rainbow	Eagle	5,280	2,1400	4.0/lb-8½″
4/21/81	Rainbow	Kamiah	6,600	3,000	2.2/lb-10½"
4/28/81	Rainbow	Kamiah	6,900	3,000	2.3/1b-10 ½"
5/5/81	Rainbow	Kamiah	9,000	3,000	3.0/lb-9½
5/15/81	Rainbow	McCall	24,500	7,000	3.5/lb-9"
5/19/91	Rainbow	Kamiah	9,000	3,000	3.0/lb-9″
5/21/81	Rainbow	Eagle	10,500	3,000	3.5/lb-9"
5/27/81	Rainbow	Eagle	6,300	3,000	2,1/lb-10"
6/2/81	Rainbow	Kamiah	5,400	3,000	1.8/lb-ll"
6/2/51	Rainbow	McCall	2,700	1,000	2.7/lb-10″
6/14/81	Rainbow	Eagle	10,200	3,000	3.4/lb-9"
6/8/81	Rainbow	Kamiah	10, 500	3,000	3.5/lb-9″
6/10/81	Rainbow	McCall	24,500	7,000	3.5/lb-9"
6/17/81	Rainbow	Eagle	25,900	7,000	3.7/lb-8½″
6/22/81	Rainbow	Eagle	9,000	3,000	3.0/lb-10"
6/23/81	Rainbow	Kamiah	11,400	3,000	3.0/lb-10″
6/25/81	Rainbow	McCall	12,400	4,000	3.1/lb-10"
6/29/81	Rainbow	Kamiah	9,900	3,000	3.3/lb-10"
7/6/61	Rainbow	Eagle	22,400	7,000	3.2/lb-10"
7/9/61	Rainbow	McCall	19,980	5,400	3.7/lb-9"
7/19/81	Rainbow	Clark Fork	23,310	5,300	3.7/lb-9"
7/13/81	Rainbow	Kamiah	11,100	3,000	3.7/lb-9"

Continued from page 7,

Fish transfers

Date	Species	Receiving Station	Number	Pounds	Size
7/16/81	Rainbow	Eagle	10,800	3,000	3.6/lb-9″
7/23/81	Rainbow	Eagle	27,300	7,000	3.9/lb—8½″
7/29/81	Rainbow	Eagle	30,800	7,000	4.4/lb—8″
8/27/81	Rainbow	Eagle	17,500	7,000	2,5/lb—10″
Total			437,510	122,700	

FISH FEED UTILIZED

The fish feed used by Hagerman Hatchery came from Rangens Inc., Clear Springs Trout Company, and Clarks. This is a list of the sizes and cost of fish feed used:

Type of Feed	Weight	Cost
Starter	150 pounds	$ 41.69
#1 Fry Feed	400 pounds	102.38
#2 Fry Feed	1,550 pounds	437.38
#3 Fry Feed	13,100 pounds	3,616.25
#4 Fry Feed	27,250 pounds	6,710.68
Fine Crumbles	57,750 pounds	12,647.53
Coarse Crumbles	68,910 pounds	15,515.16
3/32 pellets	11,910 pounds	2,292.68
4/32 pellets	45,420 pounds	7,721.40
5/32 pellets	668,658 pounds	134,045.47
Moist pellets	550 pounds	170.00
Medicated 4/32, TM-50	2,800 pounds	826.00
Total	898,448 pounds	184,126.62

The total number of pounds of feed fed was 898,448.
The total cost of the feed was $184,126.62.
The total number of pounds of fish produced was 493,425.
A conversion of 1.82 pounds of feed to produce one pound of fish.
The cost per pound of fish produced was $.66.

HATCHERY IMPROVEMENTS

Two new pipelines for the water supply (42 inches and 20 inches) were installed by Engineering Bureau, replacing the deteriorated pipelines.

The construction of the bird-wire network over the larger raceways was started, and one-third of the raceways covered.

SPECIAL STUDIES

The fin clipping of 40,000 rainbow trout catchables in the spring and 40,000 in the fall was continued for Cascade Reservoir. Also, 45,470 rainbow trout fingerlings were marked with fluorescent red and planted in Cascade Reservoir.

During the year, we received eyed eggs from College of Southern Idaho Hatchery, and the resulting fish were marked and a similar number marked from our regular stock and planted in Sublett Reservoir and Dog Creek Reservoir for a survival study comparing CSI fish to the regular stock.

MISCELLANEOUS ACTIVITIES

The hatchery personnel were involved in one salvage operation this year. At Sublett Reservoir some of the fish were sucked out of the reservoir into the stream below when the water dropped during the summer. The fish had to be salvaged when the water was turned out of the stream to increase the water in the reservoir.

The hatchery personnel were involved with sage grouse check stations in Region 4.

Several high school science classes and grade school classes were given a tour of the hatchery.

An estimated 40,000 people visited the hatchery this year, involved in looking, fishing,or hunting in the immediate area.

HATCHERY NEEDS

The continued construction of the bird-wire network over the larger raceways will be completed in the next year, now that it appears to be successful.

ACKNOWLEDGEMENTS

Hatchery staffing during the fish year included:

Bud Ainsworth, Fish Hatchery Superintendent III;
Bill Doerr, Fish Hatchery Superintendent I;
Doug Knifong, Fish Culturist;
Dave Horton, Fish Culturist;
Doug Anderson, Fish Culturist;
Ted Choules, Bio-aide;
Debbie Manning, Bio-aide;
Sonia Uppiano, Laborer;
Mike Black, CETA;
Also, for a six-month period, Fish Transport Operators
Bill Fiscus and Ralph Taylor.